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ABSTRACT

Nonverbal communicative behaviors are a primary channel for emotional expression. Emotions, in turn, strongly influence nonverbal communication displays. Thus, the role of emotions should be a central consideration in nonverbal communication studies. A study examined 34 articles, published in the "Journal of Nonverbal Behavior" between 1976 and 1994, to determine how emotion is characterized and what role is attributed to socialization and culture in emotional expression. Results indicated that emotions were usually considered simply as an abstract categorical term (e.g., fear), with little consideration for causal motivations. The impact of socialization and cultural variation was also ignored in a majority of the studies. Contains 47 references. (Author/RS)

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Running head: Emotion in Nonverbal Communication

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A competitive paper presented to the Intercultural Communication Interest Group of the Western States Communication Association, 67th Annual Convention, Pasadena, CA, 16-20 February, 1996.

ABSTRACT

Nonverbal communicative behaviors are a primary channel for emotional expression. Emotions, in turn, and strongly influence nonverbal communication displays. Thus, the role of emotions should be a central consideration in nonverbal communication studies. This essay examined 34 articles, from the Journal of Nonverbal Behavior (1976-1994), to determine how emotion is characterized and what role is attributed to socialization and culture in emotional expression. The review disclosed that emotions were usually considered simply as an abstract categorical term (e.g., fear), with little consideration for causal motivations. The impact of socialization and cultural variation was also ignored in a majority of the studies.

The Construct of Emotion in the Study of Nonverbal Communication: A Need for Definition and Greater Consideration for the Influences of Socialization and Culture

Introduction

Nonverbal communicative behaviors serve as a principal and multifaceted means of emotional expression. A smile, a shoulder shrug, raised eyebrows, or slouched body posture, for example, are considered when forming perceptions of a person's internal emotional state. Emotions such as fear, surprise, sadness, happiness, etc., are readily displayed through nonverbal expressions.

In a sense, emotions and nonverbal behaviors are inextricably interrelated, one serving the other. Internal feelings find expression through nonverbal emotive displays, and nonverbal expressions are frequently motivated by internal sensations. This relationship becomes perverse, however, when deception is introduced, such as using a smile to hide contrary feelings.

From a communication perspective, it is readily apparent that emotions can exert considerable influence on nonverbal behaviors. This leverage can result in intentional nonverbal displays, such as a smile in an attempt to dispel uncertainty, or involuntary manifestations, like a flushed face due to embarrassment. This influence raises the question of how

emotions are considered in studies of nonverbal communication? For example, how is emotion defined in nonverbal studies? Is emotion considered to be physiologically based (e.g., Panksepp, 1992) or more of a cognitive social construct (e.g., Greenwood, 1992; Lutz 1988)? Are considerations of socialization's control and cultural variations included in the studies?

This essay is an attempt to determine answers to these questions. A review of literature devoted to nonverbal behaviors is used to identify articles incorporating aspects of emotion. Selected studies are critically examined to ascertain how emotion is defined and if the formative influences of socialization and culture are factored into the research effort.

Methodology

The Journal of Nonverbal Behavior (*nee* Journal of Environmental Psychology and Nonverbal Behavior) is the principal organ for publication of studies on nonverbal communicative behaviors and often contains articles which relate to emotion and nonverbal behavior. An entire issue was devoted to "emotional experience and expression" in 1993 (Halberstadt, 1993, p. 139). A second special issue addressed the social development of nonverbal behaviors and contained a number of studies focusing on emotion (Halberstadt, 1994). For this essay, Volumes 2 though 18 (1976-1994) of the journal were examined for articles which dealt with emotion, either directly or indirectly.

Every article in each volume was inspected to determine if emotion formed a consideration in the study. A total of 34 articles met the following criteria for review. If the word emotion was included in the title or extract, the article was immediately designated for evaluation. If "emotion" did not appear in the title or abstract, the article was scanned in its entirety to determine if any aspect of emotion was integral to the study.

Reviewed articles were organized by research topics, which ultimately included facial expressions, children and emotions, gender, personality, cross-cultural, and miscellaneous. Findings within these categories are discussed individually.

Emotion and Nonverbal Studies

With a single exception, all of the articles reviewed employed a logical-positivism methodology. The studies consistently relied on data obtained from laboratory manipulation of the subjects and subsequent solicitation of self-reports. College students were most frequently used as subjects, except when children were the foci of study. Unfortunately, there were no articles relating to emotions which could be classified under the interpretative, or naturalistic, paradigm, as exemplified by the field work of Crawford et al. (1992), Desjarlais (1992), and Lutz (1988).

Facial Expressions

The nexus between emotion and facial expression was the most

common area of study among the reviewed articles, with a total of 13 published between 1981 and 1994. All centered around laboratory studies employing self-report data.

Paul Ekman's extensive corpus of work on emotion and facial expression (e.g., 1976, 1982) served as the foundation for the overwhelming majority of these studies (Berenbaum & Rotter, 1992; Boyatzis & Satyaprasad, 1994; Camras & Allison, 1985; Carrera-Levillain & Fernandez-Dols, 1994; Guthrie & Smouse, 1981; Kirouac & Dore, 1985; Knudsen & Muzekari, 1983; Mastumoto & Assar, 1992; Toner & Gates, 1985; Wiggers, 1982). Each study simply adopted some or all of Ekman's categorizations of emotions.

Definition of Emotion. Berenbaum & Rotter (1992), for example, had subjects report how "happy" or "disgusted" they felt after viewing film clips. Boyatzis & Satyaprasad's study used posed pictures of children portraying "the six basic emotions of happiness, sadness, fear, anger, surprise, and disgust" (1994, p. 42). Photos were also used by Knudsen and Muzekari to display "the basic expressions of fear, anger, sadness, and happiness" (1982, p. 204). Guthrie and Smouse (1981) applied categories of happiness, anger, disgust, sadness, fear, and surprise to photographs during their investigation of perceptions of emotion in normal and emotionally disturbed children. Additionally, Matsumoto and Assar employed photographs to illustrate "five universal emotions: anger, fear, happiness, sadness, and surprise" (1992, p. 90). Stories depicting these same six

emotions were utilized by Camras and Allison (1985) in an effort to determine if children could "properly" label emotions.

Camras, Sullivan, & Michel (1993) drew exclusively on the work of Carroll Izard and associates (e.g., Izard, 1979; Izard, Dougherty, & Hembree, 1983). They used Izard's AFFEX-specified facial configurations to characterize discomfort/pain, anger, and sadness in an infant's facial expressions. Shields & Padawer (1983) investigated children's ability to recognize their own emotive facial expressions. However, the study failed to present a concept of emotion, instead simply assigning the categories of happiness, sadness, anger, and fear to individuals' facial expressions.

In all of these articles, emotion was commonly confined to a category (e.g., fear, anger, etc.). Discussion as to basis, motivations, causes, or personal differences were not included. Only Stifter and Grant (1993) discussed the potential of emotional expressiveness being a product of biological substrates.

Socialization and Culture. Of the 13 studies on facial expressions, four tacitly alluded to the function socialization plays in the formation of emotional displays (Boyatzis & Satyaprasad, 1994; Camras & Allison, 1985; Camras, Sullivan, & Michel, 1993; Shields & Padawer, 1983). Boyatzis and Satyaprasad (1994) discovered that four and five year olds could differentiate only the most basic of gestures associated with

emotions. The authors indicated an expectation of comprehension increasing with age, implicitly suggesting that behavioral knowledge is acquired through cultural socialization. Similarly, Camras and Allison (1985) found that young children were better able to recognize more terms for emotion than the facial expressions of those emotions.

Camras, Sullivan, & Michel (1993) used the differential emotions theory to ground their investigation of emotive expressivness among infants. This theory holds that emotional development follows a maturation time table.

Shields and Padawer (1983) discovered that children three to seven years old could not identify prior self-posed pictures of emotional facial displays. This suggests that socialization plays a role in the identification of emotive display.

Two articles were more specific in considering the role of socialization. Stifter and Grant (1993) investigated emotional socialization by examining the influence of parental expressivity on infants, but arrived at mixed conclusions. Kundsen and Muzekari (1983) acquiesced to the impact of socialization by referencing earlier communication studies which purported social behaviors to be a function of a specific socio-cultural environment

Generally speaking, the categorized emotions were treated as cross-cultural universals. This was particularly salient in three cross-cultural studies which looked at various aspects of

facial expressions of emotion among French speakers in Quebec (Kirouac & Dore, 1985), Australians (Toner & Gates, 1985), and Dutch students (Wiggers, 1982). All three studies ignored the potential impact of culture on emotive expression.

Only one of the 13 studies explicitly recognized the role of culture on facial expressions of emotion. Matsumoto and Assar (1992) considered cultural socialization in their exploration of the effect of language on emotive facial expressions. Subjects for the study were Indian college students fluent in both Hindi and English. Matsumoto and Assar (1992) hypothesized that bilingual individuals, as a result of cultural assimilation associated with learning a language, would identify emotions differently when presented in Hindi and English. They posited that "language should affect judgments of emotion" (Matsumoto & Assar, 1992, p. 87). The authors concluded that the data partially supported the hypotheses, but acknowledged the study's failure to "disentangle purely 'cultural' effects from purely 'language' effects" (Matsumoto & Assar, 1992, p. 95).

However, cultural sensitivity in Matsumoto and Assar's (1992) appears to have been quite localized. In their study, the native bilingual college students in India were asked to label emotions depicted in photographs of facial expressions posed by Caucasian and Japanese models. The potential impact of cultural variations between the subjects and the models was not addressed.

Children and Emotion

The second most common area of study was that of emotion and children. Five articles looked at this subject, and topics included, among others, the role of socialization, nonverbal display rules, and parental influence.

Definition of Emotion. With one exception, all of the five studies considered emotion as just a category. Using a series of vignettes, each representing happiness, anger, sadness, or fear, Casey and Fuller (1994) examined strategies used by parents to regulate their children's emotional behavior. In a study of the socialization of emotion, Denham and Grout observed children's facial expressions, gestures, and posture to identify incidences of "happy, sad, angry, tense/afraid, neutral, or 'other' emotions" (1993, p. 209-210). Tape recordings were employed by (Hortacsu and Ekinci, 1992) to determine if Turkish children could identify anger or happiness from vocal tone and context. Anger and happiness were selected because previous literature had identified them as 'simple' emotions. Video tapes of laboratory conversations and self-report questionnaires were used by Kahlbaugh and Haviland (1994) to analyze the interaction of pre-adolescents and adolescents with their parents. An extensive list of nonverbal facial expressions and body movements were constructed to measure children's approach and avoidance behaviors.

A single study considered emotion as more than a topical category or subject. Looking at nonverbal display rules in

preschool children, Josephs acknowledged that emotion and expression can be incongruent, that "feelings are private, and that nonverbal expressions can be deliberately modified in order to deceive" (1994, p. 302). She also posited that real feelings are internal and overt expressions are apparent feelings.

Socialization and Culture. The socialization of emotional expression was acknowledged, either directly or indirectly, in four of the articles. Josephs (1994) strengthened the case for the socialization of emotional expression by discovering that older children were better than their younger cohorts at distinguishing between real (internal) and apparent (external) emotion. She also found that even when the younger children could not differentiate between felt and expressed emotion, they adhered to the display rules appropriate for the context.

A study of preschool children by Denham and Grout (1993) specifically examined the socialization of emotional expression. They revealed that the children's displayed emotions were a function of parental expressivity. Additionally, data analysis disclosed that the children altered the "patterns of expressiveness" when interacting with different social partners (Denham & Grout, 1993, p. 223). Similar findings by Casey & Fuller (1995) corroborated the impact of parental socialization.

Hortacsu & Ekinci (1992) indirectly addressed the socialization process. Their work with Turkish children revealed that the ability to discern emotion was a function of age.

Although four of the five studies on children and emotion considered socialization, none directly discussed the issue of cultural influences or variations. Hortacsu & Ekinci (1992) relied exclusively on Western sources to support their investigation of Turkish children. Although affiliated with a German institute, Josephs (1994) did not reveal where her study of preschoolers was conducted, but a close reading suggests it was in Germany. She tangentially indicates that culture plays a role in emotions by suggesting that "negative emotions seem to be a target of display role socialization" in Western culture (Josephs, 1994, p. 312).

Gender

While several studies made mention of uncovering gender differences in issues of nonverbal behavior, only four dealt directly with the question. These articles examined dissimilarities in nonverbal expressiveness, coding abilities, and usage in prose.

Definition of Emotion. One study contrasted the ability of males and females to encode-decode nonverbal emotional messages and found that women were more proficient. Using affective behavior as the emotional variable, subjects viewed slides designed to "evoke reliably happy, sad, interest-surprise, and disgust reactions" (Fujita, Harper, & Wiens, 1980, p. 134). In a similar study, Wagner, Buck, and Winterbotham (1993) videotaped men and women as they looked at slides depicting Izard's (1977)

ten fundamental emotions. They also discovered that, in matters relating to nonverbal communication and emotion, women held an advantage, which was attributed primarily to socialization. Tucker and Friedman (1993) used a laboratory setting to examine gender differences in nonverbal expressiveness. Subjects were videotaped as they "posed the emotions of sadness, happiness, and anger" (Tucker & Friedman, 1993, p. 108). Undergraduate judges subsequently rated the videotapes for expressiveness. Broadly speaking, women were found to be more emotionally expressive. All three of the studies viewed emotion merely as a category.

In the only reviewed study to depart from the positivistic paradigm, Hall, Aist, and Pike (1983) employed content analysis of 64 novels to ascertain if men and women authors varied in their written descriptions of nonverbal behaviors, expression, emotion, and people's attributes. Phrases extracted from the novels were simply classified as depictions of positive or negative emotions. Little gender difference was discerned.

Socialization and Culture. The influence of culture and socialization was raised in three of the four articles on gender differences. Fujita, Harper, and Wiens (1980) attributed women's greater expressivity to Western males' culturally learned inhibition of affect displays. This rationale was also used by Wanger, Buck, and Winterbotham (1993) to explain men's reduced expressiveness.

Tucker and Friedman indirectly involked critical theory by

raising the possibility that "expressive behaviors of men and women are, in part, influenced by a socio-political environment which tends to oppress women" (1993, p. 115). They also attributed differences to individual factors such as personality, motivation and aptitude.

Wanger, Buck, and Winterbotham (1993) acknowledged another impact of culture. Their study used American encoders and British decoders, and the authors acknowledged that cultural differences between the U.S. and British participants may have effected the study's outcome.

Personality

The role of personality and the nonverbal communication of emotion was examined in two articles. The function of personality traits in the ability to pose emotion was explored by Friedman, Riggio, and Segall (1980). In a quite similar exploration, the influence of personality on perceived success at communicating emotion through facial expressions was the subject of the second study (Riggio, Widaman, & Friedman, 1985). Standardized personality measures were administered to the subjects, who were then videotaped posing emotions. Neither of these articles contained a clear definition of emotion.

Definition of Emotion. In both studies, emotion was divided into six basic categories, consisting of happiness, anger, surprise, disgust, sadness, and fear, without further elaboration. Friedman, Riggio, and Segall (1980) credited Paul

Ekman and Carroll Izard for establishing these categories. The second study simply includes the categories in the method section without attribution (Riggio, Widaman, & Friedman, 1985).

Socialization and Culture. Only one article addressed the role of culture and socialization. Riggio, Widaman, and Friedman (1985) indicated that men and women are socialized to display different levels of intensity of emotional expressivity.

Cross-Cultural Studies

Several of the studies were implicitly cross-cultural, using subjects from India, Australia, Turkey, etc., and have already been mentioned. In each of these instances, however, the researchers viewed nonverbal emotive expressions through a decidedly Western lens. Bond's (1993) work was the sole article dedicated to cross-cultural inquiry.

Interestingly, his article on Chinese emotional expressivity contains the most comprehensive definition of emotion. For Bond, emotions are "interpretations of physiological response to important social events with these interpretations guiding behavior" (1993, p. 245).

Culture (i.e., China) and socialized behaviors are important considerations in Bond's study. Culture is seen as the regulator of varying emotional intensities and expressiveness between social groupings. Physiological reactions, however, are considered to possess a degree of universality (Bond, 1993).

Miscellaneous Studies

Six of the reviewed articles were related to topics which could not be grouped within other classifications. These are discussed individually.

In a study on the effects of crowding, Walden and Forsyth made no specific mention of emotions but concluded that "excessive interpersonal proximity has different effects on subjective feelings,...and psychophysiological responses" (1981, p. 62). Friedman and Riggio (1981) used self-report measures to examine degrees of expressiveness and concluded that nonverbal emotional expressivity influenced the spread of emotion. Their study did not define emotion beyond the terms of anger, fear, and anxiety. Culture or socialization was not considered in either of the two articles.

Schmais and Schmais (1981) used videotapes of a female dancer demonstrating sadness, anger, and happiness to test dance therapy and social-work students' ability to "mirror" (i.e., replicate) emotions. While the dance students outperformed the social-work students, the results indicated that an individual's expressiveness was not an indicator of their mirroring ability. In this case, emotion was defined simply as sadness, anger, and happiness. Culture and socialization were not mentioned. However, lack of gender control was considered a limitation of the study because only a female model and female coders were used.

A study reflecting the encroachment of modern technology

used videotapes to reveal that distortions of picture quality adversely influenced recognition of facial expression of emotion (Wallbott, 1992). Fourteen emotions, defined as fear, terror, shame, etc., were selected from previously published literature. Neither socialization nor culture were cited as factors in this investigation.

A recent study explored nonverbal behaviors as cues to arousal, and facial expressions were seen "as external manifestations of felt emotions" (Burgoon, et. al., 1993, p. 161). Socialization and culture were not considerations in this effort, but it was recognized that "individuals differ in their overt expressiveness of internally experienced arousal" (Burgoon, et. al., 1993, p. 161). The causality of these differences were not explored.

In the only theoretical article uncovered during this review, Barrett (1993) advocates a functional perspective of nonverbal communication of emotion. Her article critiques the differential emotions theory, the behavioral ecology approach, and the social process theory. She also includes several definitions of emotion drawn from contemporary sources, debates the merits of each, and provides her own, which may be broadly characterized as the interaction between the individual and her/his contextual environment. Considerable discussion is devoted to the role of socialization and cultural inherency is implied.

Conclusions

What can be learned from this lengthy and occasionally critical summation of literature on nonverbal communication and emotion? When considered in aggregate, the articles give rise to several observations.

First, it is clearly evident that in nonverbal communication studies emotions are usually considered as an abstract category (e.g., fear, anger, happiness). There is little discussion on what motivates or perpetuates these 'feelings'. Moreover, the physiological properties of emotions are seldom addressed. Only a few of the reviewed studies acknowledge that there was more than a social dimension to emotion. Apparently, it is assumed that readers understand emotion, and there is no need to situate the construct.

Many of the studies recognized the role and importance of socialization on emotional expression. However, a substantial number ignored this influence. Likewise, the significant capacity of culture to shape emotive expressions was frequently omitted. The majority of the articles implicitly adopted the Western perspective as a seemingly indisputable universal. This was particularly evident in those studies employing subjects from other nations. Even for research using U.S. subjects, the Western perspective was tacitly treated as a homogenous concept, ignoring North America's multiplicity of ethnicity.

Numerous articles acknowledged gender difference in

nonverbal communication capability and emotional expressivity. Beyond socialization's influence, however, causalities of these differences were never explored.

Facial expressions and children remain the most studied area of research connecting nonverbal behaviors and emotion. This is no doubt partly a result of the early work done by Paul Ekman. The importance of learning and child development not with standing, ease of examination is could be another reason. The use of photographs to obtain self-report data lends itself to quantitative analysis.

Also, it appears that the bulk of research in the area of emotion and nonverbal behavior is being conducted by researchers from the field of psychology. Of the 34 articles reviewed, 22 of the first authors were affiliated with psychology departments or institutes. Only two first authors could be identified as communication scholars.

Afterthoughts

The continuing growth of transnational economic interdependencies is forcing peoples of diverse cultures and ethnicities into frequent and sustained interpersonal interactions. When individuals from different nations, cultures, ethnic groups, regions, etc., come into contact with each other, an appreciation of the emotions driving nonverbal expressions can

reduce interpersonal ambiguity and, hopefully, help foster greater tolerance and increased understanding. Accordingly, there is an increasing need to appreciate and comprehend nonverbal expressions of emotion. The current literature on nonverbal behaviors and emotion does not satisfy this requirement. Research is needed which delves into the complexities of emotive behavior. Future studies must moves beyond the generalization of emotions as abstract categorical classifications and as cultural universals. Most of all, future research must recognize, and include, the cultural diversity which exists in the U.S. and other nations. Culture and nationality are not synonymous!

Finally, research is needed to further explicate the posited variance in emotive discernment and expressivity between men and women. The socialization hypotheses is tacitly based on gender emotional equality, with differences attributed to cultural factors. This hypotheses tends to sublimate other possible influences -- e.g., psychological, neurological, etc. Future investigations must move beyond the limiting constraints of the socialization hypothesis and explore a broader range of potentials, such as the genetic and neurological sex differences discussed by Begley (1995), Kimura (1992), and Moir and Jessel (1991).

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Table 1.

Chronology of Professor Ray L Birdwhistell's Career

Academic degrees

1940	A.B., Miami University, Ohio.
1941	M.A., Ohio State University
1951	Ph.D, University of Chicago

Academic positions

1942-44	Research Associate, Office of Indian Affairs
1944-46	Lecturer in Anthropology, University of Toronto
1946-48	Instructor in Sociology, University of Louisville
1948-52	Assistant Professor, University of Louisville
1952-56	Associate Professor, University of Louisville
1956-59	Associate Professor of Anthropology, University of Buffalo
1959-66	Professor of Research in Anthropology, Health Sciences Center, Temple University
1966-68	Clinical Professor of Psychiatry and Adjunct Professor of Anthropology, Health Sciences Center, Temple University
1969-70	Visiting Professor, Annenberg School of Communications, University of Pennsylvania
1970-83	Professor of Communication, Annenberg School of Communication, University of Pennsylvania
1983-88	Professor of Folklore and Communication, Annenberg School of Communication, University of Pennsylvania
1988-94	Professor Emeritus, Annenberg School of Communication, University of Pennsylvania

Source: ("Fifth", 1975; Kinsman, 1974; "Who's", 1994)

Table 2.

Citations of Birdwhistell's Works in *SSCI*

Year	*Total cites*	*Communication article cites*
1966-1970	128	4
1971-1975	210	16
1976-1980	229	20
1981-1985	187	15
1986-1990	94	14
1991	9	1
1992	24	2
1993	14	1
1994 (to May)	4	0

Table 3.

Citations of Birdwhistell's Works in Communication Journals (January, 1966 - April, 1994)

Title	*No. of articles*[1]
Journal of Nonverbal Behavior	13
Journal of Communication	9
Human Communication Research	6
Quarterly Journal of Speech	6
Communication Research	3
Language and Communication	3
Communication	2
Speech Monographs	2
Communication Monographs	1
Speech Teacher	1
Language and Speech	1
Communication and Cognition	1
Written Communication	1
International Journal of Intercultural Relations	1
Total	50

Notes: [1]Articles containing one or more citations

Source: *SSCI*